

ABSTRACT

An external mixer assembly is provided which externally mixes and delivers a first and a second component of a biological adhesive to tissues or organs for sealing wounds, stopping bleeding and the like. The first and second components are mixed immediately after exiting from separate outlet ports disposed in fluid communication with component reservoirs. In one embodiment, the external mixer assembly includes a housing having a housing head for enclosing therein a first reservoir containing the first component, and a second reservoir containing the second component. The housing further includes a discharge nozzle defining a longitudinal axis for enclosing therein a conduit assembly having a first and a second conduit in communication with the first and second reservoir, respectively. A deflector assembly is connected to the discharge nozzle. The deflector assembly includes a deflector plate to provide a space for initial mixing of the first and second components. The deflector plate is oriented in generally parallel juxtaposed relation distal to the distal face of the discharge nozzle. The first and second components are preferably fibrinogen and thrombin which intermix to form a fibrin sealant.